



## **DEPARTMENT OF COMMERCE**

### **National Institute of Standards and Technology**

#### **Discovery and Information Sharing Event Regarding Direct Realization of Mass**

**AGENCY:** National Institute of Standards and Technology (NIST), Commerce.

**ACTION:** Notice.

**SUMMARY:** The National Institute of Standards and Technology (NIST) is providing a public opportunity to learn more about NIST efforts to develop a tabletop Kibble balance aimed at realizing mass [500 mg – 20 g], with uncertainties of parts in  $10^6$ , and traceable to the new quantum International System of Units (SI). The two-hour virtual meeting will take place October 19, 2022, 11 a.m. – 1 p.m. eastern time.

**DATES:** The workshop will be held on October 19, 2022, 11 a.m. – 1 p.m. eastern time. Registration is not required but requested via email to Leon Chao at [leon.chao@nist.gov](mailto:leon.chao@nist.gov).

**ADDRESSES:** The workshop will be held virtually via webinar. Participation information:

MS Teams Meeting Link:  
Meeting ID: 236 220 981 414  
Passcode: pV482e

Or call in (audio only):  
+1 443-339-4347  
Phone Conference ID: 206 869 111#

**FOR FURTHER INFORMATION CONTACT:** For questions about this workshop contact: Leon Chao, U.S. Department of Commerce, National Institute of Standards and

Technology (NIST), 100 Bureau Drive, Gaithersburg, MD 20899, telephone: (301) 975-4763, email: [leon.chao@nist.gov](mailto:leon.chao@nist.gov). Please direct media inquiries to NIST's Office of Public Affairs at (301) 975-2762.

**SUPPLEMENTARY INFORMATION:** The National Institute of Standards and Technology (NIST) is providing a public opportunity to learn more about NIST efforts to develop a tabletop Kibble balance aimed at realizing mass [500 mg – 20 g], with uncertainties of parts in 10<sup>6</sup>, and traceable to the new quantum International System of Units (SI). A first-generation prototype, KIBB-g1 (patented by NIST), has proven gram-level masses can be directly realized via a tabletop-sized, low complexity, affordable system. Several government agencies are collaborating with NIST to develop a second-generation model (provisional patent submitted).

NIST is inviting industry leaders in mass metrology and precision balance manufacturing, as well as other interested parties, to attend a two-hour virtual meeting to learn more about the next generation tabletop Kibble balance and opportunities for potential collaboration with NIST to advance this technology.

**Authority:** 15 U.S.C. 272(b) & (c).

**Alicia Chambers,**  
*NIST Executive Secretariat.*

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